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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/889,608	02/04/2002	Stevan George Calland	UDL 20015	6923
7590	06/18/2004			
James W McKee Fay Sharpe Fagan Minnich & McKee 7th Floor 1100 Superior Avenue Cleveland, OH 44114-2518			EXAMINER SHEWAREGED, BETHELHEM	
			ART UNIT 1774	PAPER NUMBER
DATE MAILED: 06/18/2004				

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/889,608	CALLAND, STEVAN GEORGE	
	Examiner Bethelhem Shewareged	Art Unit 1774	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If no period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 08 April 2004.
- 2a) This action is **FINAL**. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-39 is/are pending in the application.
- 4a) Of the above claim(s) 11-19 and 37-39 is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 1-10 and 20-36 is/are rejected.
- 7) Claim(s) _____ is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) All b) Some * c) None of:
1. Certified copies of the priority documents have been received.
2. Certified copies of the priority documents have been received in Application No. _____.
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsman's Patent Drawing Review (PTO-948)
- 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) Notice of Informal Patent Application (PTO-152)
- 6) Other: _____

DETAILED ACTION

1. Applicant's response filed on 04/08/2004 has been fully considered. Claims 1, 10 and 20 are amended, and claims 1-39 are pending. (NOTE: Claims 11-19 and 37-38 are withdrawn as non-elected invention).

Election/Restrictions

2. Applicant's election with traverse of Group I (claims 1-10 and 20-36) in Paper No. 20040408 is acknowledged. The traversal is on the ground(s) that all claims share the special technical feature. This is not found persuasive because the special technical feature does not define a contribution over the prior art because it is revealed by Ruch. Thus a lack of unity of invention exists.

The requirement is still deemed proper and is therefore made FINAL.

Claim Objections

- a. Claims 2, 25, 29, 31 and 32 are objected to because of the following informalities: A broad range or limitation together with a narrow range or limitation that falls within the broad range or limitation (in the same claim) is considered indefinite, since the resulting claim does not clearly set forth the metes and bounds of the patent protection desired.
- b. In claims 3, 4, 24 and 25, sulfate is misspelled as sulphate.

Appropriate corrections are required.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-10, 20-36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Body et al. (GB 2 301 845 A) in view of Ichinose et al. (US 6,685,999 B2).

Body teaches a recording sheet comprising a paper substrate and a composition having a combination of a water soluble cationic substance and a water soluble binder substance (abstract). The cationic substance may be a metal salt such as magnesium sulfate (page 4, line 24), or cationic polymer such as poly-quaternary amine (page 4, line 34). The binder substance may be polyvinyl pyrrolidone, polyvinyl alcohol, carboxymethylcellulose, and starch, wherein the binder substance has a molecular weight of 790,000 to 1,350,000, and a viscosity defined by a K-value of at least 30 (page 5, lines 1-13). The amount of the cationic substance and the amount of the binder substance are taught in page 5, lines 15-23. The paper substrate may be an opaque paper (page 5, line 26). Body does not disclose an opaque paper having the claimed filler. The inclusion of filler such as hydrated alumina into a base paper to make the paper opaque in order to provide a photographic-type image is well known in the recording art (see paragraph bridging col. 7 and col. 8 of Ichinose). With

respect to the amount of filler contained in the paper layer, the experimental modification of this prior art in order to ascertain optimum operating conditions fails to render applicants' claims patentable in the absence of unexpected results.

In re Aller, 105 USPQ 233. One of ordinary skill in the art would have been motivated to adjust the filler in order to optimize the opacity of the paper. A *prima facie* case of obviousness may be rebutted, however, where the results of the optimizing variable, which is known to be result-effective, are unexpectedly good.

In re Boesch and Slaney, 205 USPQ 215. Furthermore, with respect to claim 7, one of ordinary skill in the art would have been motivated to optimize the rate so as to control or enhance print quality.

With respect to claim 6, inclusion of additives such as optical brightening agent in a recording layer is notoriously known in the recording medium art.

Since the claimed invention uses conventional method of printing and conventional printing apparatus, the claimed invention reads on the prior art, furthermore, the criticality of the claimed method of printing and printing apparatus has not been shown in the current specification.

Conclusion

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Betelhem Shewareged whose telephone number is 571-272-1529. The examiner can normally be reached on Mon.-Thur. 7:30AM-6:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cynthia H Kelly can be reached on 571-272-1526. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Betelhem Shewareged
June 12, 2004.